

Environmental Viability of Hydrogen

Jason Mark Clean Vehicles Director



Knowing Hydrogen's Place

Timeframe

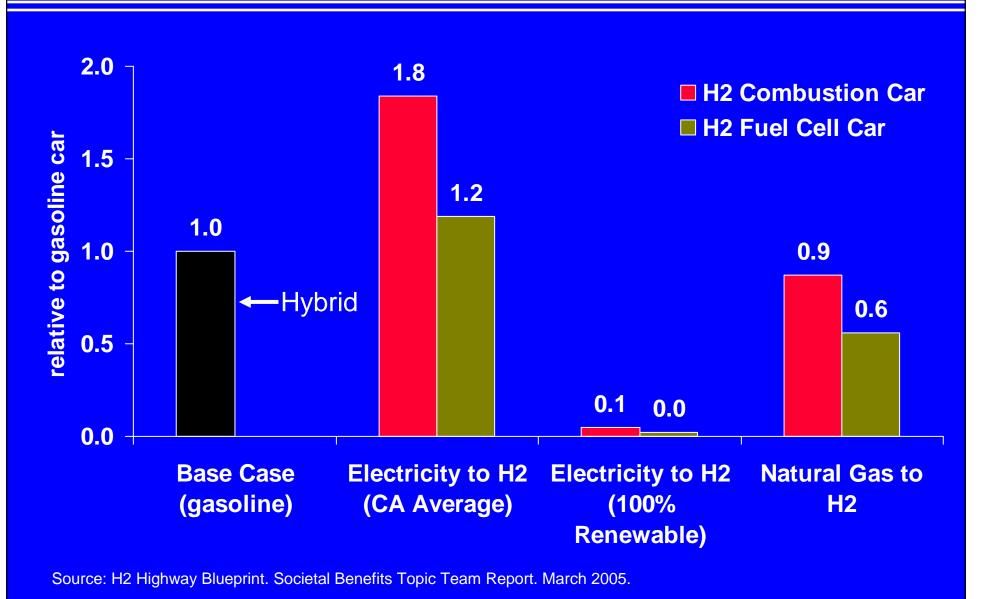
• Environmental Performance

Green Investing



Global Warming Pollution:

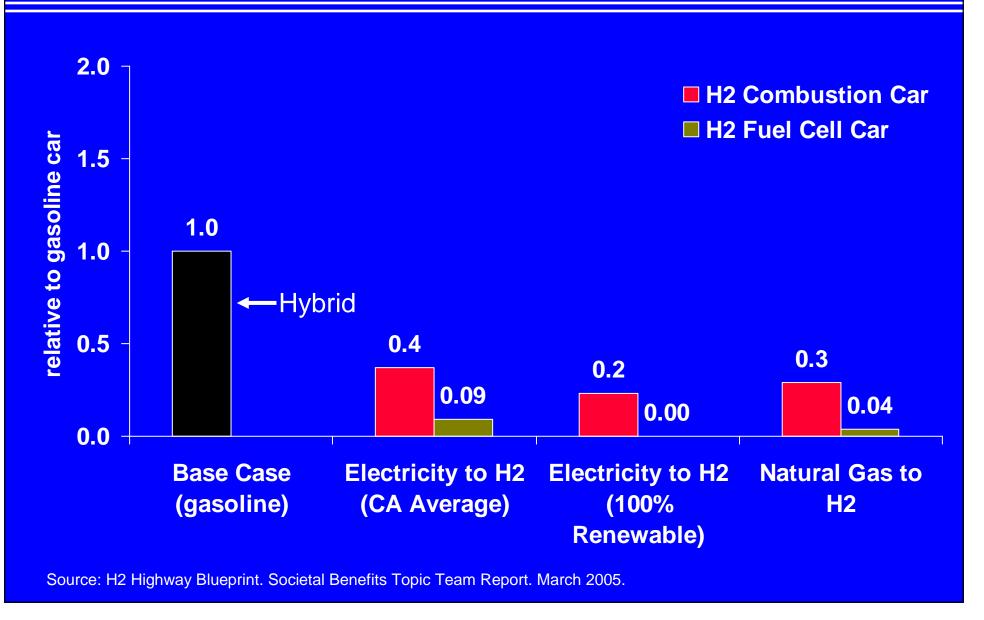
Well-to-Wheels Emissions





Smog-Forming Pollution:

Well-to-Wheels Emissions





Blueprint Goals: 2010 Targets for CA H₂ Production/Use

- Renewable energy
 - 20% *new* renewable sources
- Greenhouse gases
 - 30% reduction vs. today



• Timeframe

- More immediate solutions available, but
- Long-term solutions need investment today

• Environmental Performance

- High-efficiency, low-carbon solutions are essential
- Near-term hydrogen can be green

Green Investing

- Establish environmental performance goals
- Ensure technology diversity